Practice: 356 - Dike Scenario: #1 - Dike

## **Scenario Description:**

Construction a barrier of either earth or manufactured materials for the purpose of the protection of people or property from floods or to control water levels in connection with crop production; fish and wildlife management; or wetland maintenance, improvement, restoration, or construction. Embankment structure to provide adequate freeboard, allowance for settlement, and foundation and embankment stability.

## **Before Situation:**

Site is subject to flooding or indundation which poses a potential hazard to public safety, damage to land or property. Site may also require control of water level for purposes connected with crop production; fish and wildlife managment; or wetland maintenance, improvement, restoration, or construction. An adequate quantity of soil suitable for constructing an earthen dike is available at an economical haul distance.

## **After Situation:**

Water level is controlled by a stable earthen structure installed with compacted fill material. Material haul < 1 mile. Typical earthen dike assumed 1000 lineal feet, Class II (6 ft. in height, 8 ft. top width, 2H:1V side slopes). Potential hazard to public safety, land or property mitigated; environmental benefit provided. Scenario includes component for stripping and stockpiling base of dike. Associated practices include, but are not limited to: PS327 Conservation Cover, PS656 Constructed Wetland, PS342 Critical Area Planting, PS378 Ponds, PS382 Fence, PS464 Irrigation Land Levelling, PS500 Obstruction Removal, PS528 Prescribed Grazing, PS587 Structure for Water Control, PS620 Underground Outlet, PS645 Upland Wildlife Management, PS658 Wetland Creation, PS659 Wetland Enhancement, PS657 Wetland Restoration, PS644 Wetland Wildlife Habitat Management.

Scenario Feature Measure: Cubic Yards of Earthmoving

Scenario Unit: Cubic Yard Scenario Typical Size: 4,444

**Scenario Cost:** \$20,861.64 Scenario Cost/Unit: \$4.69

Cost Details (by category): Price **Component Name Component Description** Unit **Quantity Cost** (\$/unit) Equipment/Installation Earthfill, Roller Compacted 49 Earthfill, roller or machine compacted, includes equipment Cubic \$3.99 5036 \$20,093.64 and labor vard 592 1199 Stripping and stockpiling of topsoil adjacent to stripping Cubic \$0.86 \$509.12 Stripping and stockpiling, area. Includes equipment and labor. topsoil Yard Mobilization Mobilization, medium 1139 Equipment with 70-150 HP or typical weights between Each \$258.88 \$258.88 14,000 and 30,000 pounds. equipment